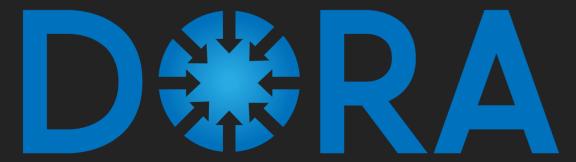


The misunderstanding, misuse, and mischief caused by the Journal Impact Factor (JIF)



Stefano Bertuzzi, Ph.D., M.P.H. Executive Director American Society for Cell Biology

San Francisco



Declaration on Research Assessment

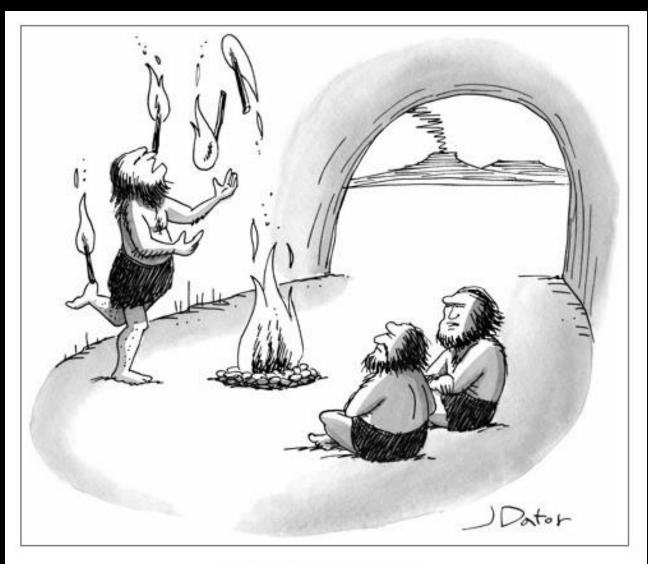
www.ascb.org/dora

The Journal Impact Factor

The JIF is a ratio between citations and recent <u>citable items</u> published in a given <u>journal</u>.



Misunderstanding: a metric developed for librarians



What a misunderstanding!

Misuse in the scientific community

中国科学院生物物理研究所

关于调整研究所科技绩效奖励方案的通知

Jo Market

经所学术委员会研究,第九届所长第15次所务会讨论通过,决定对我 所"科技绩效奖励"方案进行如下调整:

1、研究论文奖励等级分为:一等奖、二等奖和鼓励奖。奖励范围和金额如下:

奖励等级 奖励范围 单篇奖金 一等业 《Cell》、《Nature》、《Science》 20万元 二等奖 《PNAS》以上及相当 5万元 或励头 《二元化序》、"京中、《生物物理学报》、《Protein Cell》 500元

"PNAS 以上及相当": 原则上为当年 IF≥PNAS 的期刊。特殊情况需重点实验室提交所学术委员会审议

- 2、增加对联合培养学生发表论文的奖励。对于联合培养的研究生,科研工作在我分完成,以我所为共同的第一作者单位和通讯作者单位的研究成果(其中学生设备以单位签订的联合培养学生协议为依据)。
- 3、此方案从 2013 年起实施, 2011 年发布的《研究所科技绩效奖励办法》(科生发科字[2011]46 号)中与此不一致部分同时废止,不再另行发文,科学与技术处负责解释。

Prize

30,000

7,300

\$75

PNAS o

Cell, Natu

IF<

Mischief in a hyper-competitive environment





What matters is what not where!



DORA is about culture change in the scientific community



San Francisco Declaration On Research Assessment

San Francisco

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Declaration on Research Assessment

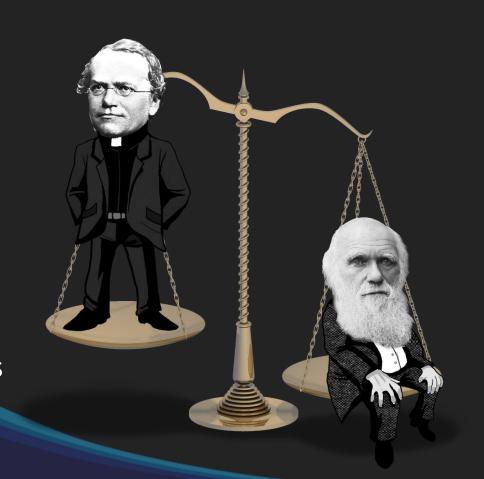
- Editors and publishers met at ASCB 2012 in SF
- 155 original signers
- 82 organizations (HHMI, Wellcome Trust, AAAS, EMBO, PNAS...)
 - Released on May 16, 2013:
- As of April 23, 2015
 - 12,377 Individuals
 - 572 organizations



Makes one general and 17 specific recommendations

General recommendations:

Do not use journal-based metrics, such as Journal Impact Factors, as a surrogate measure of the quality of individual research articles, to assess an individual scientist's contributions, or in hiring, promotion, or funding decisions

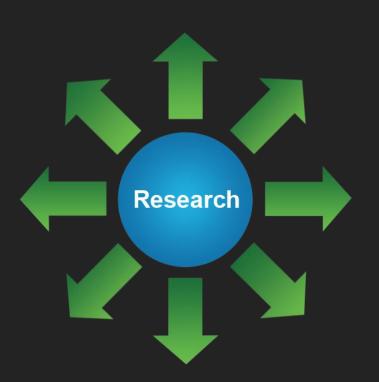


To Funding agencies:

- State that scientific content is what matters
- Consider value from all outputs and outcomes generated by research

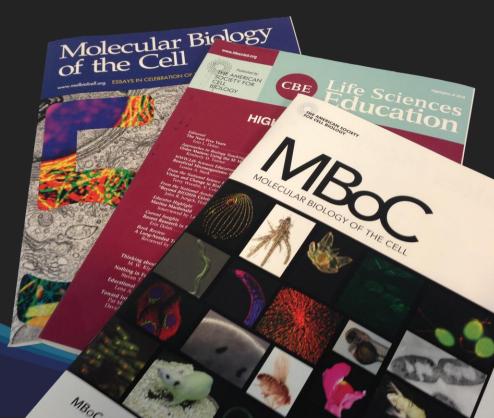
To Research Institutions:

- To assess hiring and promotions: state that scientific content is what matters
- Consider value from all outputs and outcomes generated by research



To Publishers:

- Cease to promote journals by Impact Factor, provide an array of metrics
- Focus on article-level metrics
- Identify different author-level contributions
- Open the bibliographic citation data
- Encourage primary literature citations

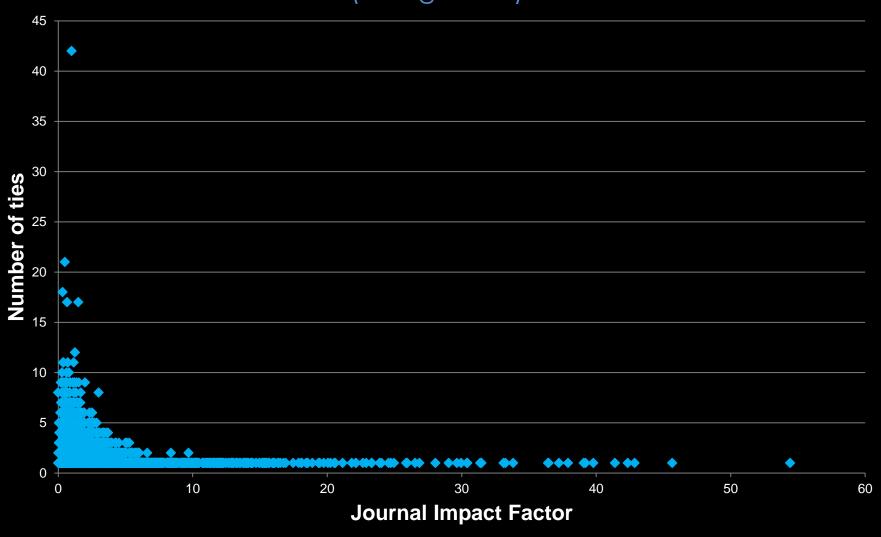


To Organizations that supply metrics:

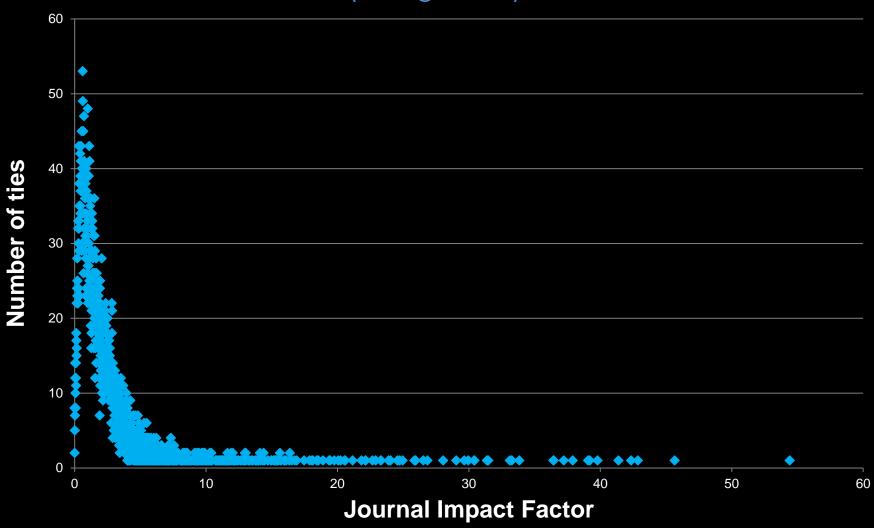
- Be transparent
- Provide access to data
- Discourage data manipulation
- Provide different IFs for primary literature and reviews
- Use the medians instead of means
- Avoid three decimal points in the JIF



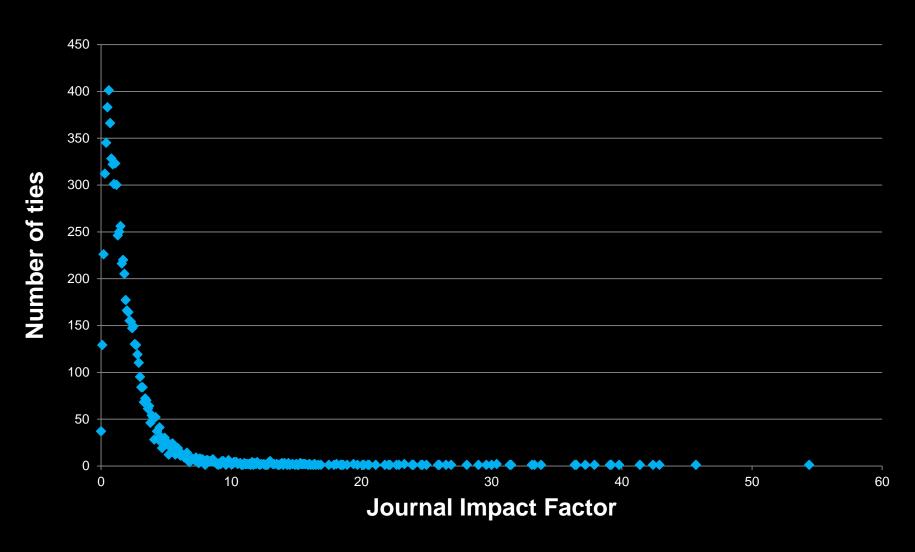
Three Decimal JIF (Range 0-60)







One Decimal JIF (Range 0-60)



To Researchers:

- Focus on content
- Cite primary literature
- Use a range in metrics in supporting your impact

Change the culture!



If not the JIF, then what?

The DORA website highlights examples of Good Practices in:

- Recruitment
- Journal choice by authors
- Funding and fellowships
- Awards
- Professional society practices

Recruitment

Multiple Tenure-track Assistant Professor Positions Department of Cell Biology UT Southwestern Medical Center

The ideal candidate will be evaluated only on the significance of the discoveries the candidate has made (not on the impact factors of the journals where his or her results were published), and on whether he or she is the best fit to complement and augment the intellectual creativity, skills, and innovation potential of this department.



Recruitment

Instructions to applicants for faculty positions at the Gulbenkian Institute:

The CV with publication list should not present numerical indicators such as impact factors, numbers of citations or Hirsch (H) factors, and such indices will not be taken into consideration throughout the selection procedure. Applicants are, however, invited to propose up to three of their papers that they consider of special merit, with a brief explanation of why each was chosen.



Journal Choice by Authors

Successful scientists explain why JIFs have played little role in their decisions about where to publish their work:

"Like most scientists, we try very hard to submit our work to the most appropriate journal. Journal prestige may play a role, however publication without unnecessary disappointments, delays, or overhype is essential. In my entire career we have rarely submitted our work to high impact factor journals."

Peter Agre, Nobel Laureate



Funding and Fellowships

From the instructions to applicants for EMBO Long-term Fellowships:

In your publication list, you should indicate your three most important publications, i.e., the three primary research papers that in your view provided the most important and original contributions to scientific knowledge irrespective of journal name and impact factor. Do NOT add the journal impact.



NIH Changed its Biosketch Format

The NIH modified the Biosketch by including a most significant accomplishments section



Awards

Selection criteria for the Annual ASCB Kaluza Prizes supported by Beckman Coulter to honor academic excellence in graduate student research:

"Candidates will be evaluated on the significance of discoveries they have made, not on the impact factor of the journals where results have been published."



2014 Kaluza Award Winner
Josie Clowney
Rockefeller U.

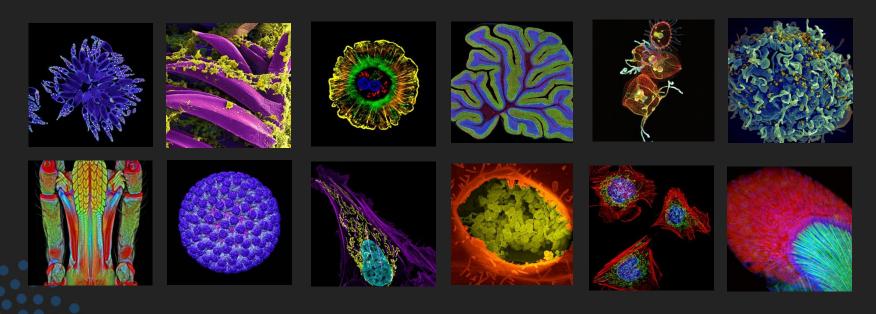
Professional Society Practices

Advertising policy

ASCB will not permit advertisement of journal impact factors in any of its publications or in promotional materials that it distributes on behalf of exhibitors at the ASCB Annual Meeting



Thank you!





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